



Plant Chat

A Quarterly Publication from the Bismarck Plant Materials Center
to the NRCS Field Offices in North Dakota, South Dakota, and Minnesota

Winter 2005

Volume 5, Issue 1

<http://Plant-Materials.nrcs.usda.gov>

When planning for Farm Bill programs, strongly consider using certified seed. A primary function of the PMC is to develop new varieties of grasses and forbs for conservation purposes and to grow foundation seed of these releases. Varieties released by the PMC, universities, and experiment stations have the potential to be certified. Following is an article by Steve Sebesta of the North Dakota State Seed Department (NDSSD) outlining certified seed benefits. Though written primarily for grain, it is pertinent for grasses and forbs.

Capture the Value of Certified Seed

Steve Sebesta, Director, Field Seed Program
(Reprinted with permission from
The North Dakota Seed Journal)

Quality. How do you recognize it? How do you measure it? What value do you place on it? Everything has value, some things more than others. When you begin the task of selecting varieties for your farm what do you consider? Some common criteria include brand, product performance, availability and price. But, how about seed quality? Do you consider seed quality when making your seed buying decisions?

Seed quality is perhaps one of the most important factors in your buying decision. All seed is not equal. Plant breeders invest approximately ten years developing new varieties from the time a cross is made until final release. During that time, experimental lines are tested for yield potential in multiple environments, quality characteristics and tolerance to pests. It is an extensive evaluation process in order to bring you new genetics that will provide value to your farm and the agricultural industry. Think of the advances in the last five, 10, 20 or 50 years of plant breeding. Has the genetic contribution to higher yields improved? Undoubtedly! Have you captured the value of those varieties? Purchasing quality seed of proven, adapted varieties is the best way to capture the true value of every variety.

The seed certification process was established to ensure that the attributes selected by the breeder are actually delivered in the seed you purchase. The process was established to ensure an adequate supply of

high quality seed through a series of field inspections and laboratory analyses. **Let's examine why certified seed is a value.**

FIELD INSPECTED

...to ensure genetic identity

The number of generations seed may be used for multiplication is limited, usually to three generations: Foundation, Registered and Certified. This means that certified seed is never more than three generations removed from breeder seed, the purest available. This ensures that the genetic potential that was bred into a variety, the very potential that gives a variety its unique value, is still present in the seed you plant. Certified seed producers must provide proof of genetic identity when they apply for certification. Our staff verifies the identity of every variety in every field prior to acceptance into the certification process. Trained field inspectors then examine each seed field based on the variety characteristics described by the breeder to verify the variety is correct.

...to ensure seed purity

Field inspectors also examine seed fields for other factors that affect purity of the seed such as isolation, the presence of other crops or other varieties. They also check for a long list of weeds that can impact the purity of the seed.

Most crops are inspected once prior to harvest. Some crops such as soybeans may be inspected twice to check for flower color or field reaction to herbicide, or in the case of dry edible beans, for incidence of seed-borne diseases such as anthracnose and bacterial blight.

PROFESSIONALLY CONDITIONED

...to ensure proper handling

Field-inspected seed must be conditioned at an approved conditioning facility to ensure its high quality. Annual inspections by the Seed Department ensure that the conditioner has the proper equipment to adequately clean and handle certified seed, maintains a clean facility, and maintains proper records on each lot of seed they condition. Approved seed conditioners and mobile mills are listed in the Seed Directory and the department website. A representative sample of every conditioned seed lot

must be submitted to the seed department for lab analysis.

LABORATORY TESTED

...for purity

Trained seed technologists at the NDSSD examine every conditioned seed lot for physical purity. The purity analysis must be listed on the tag or bulk certificate of every lot of certified seed. Certified seed must meet or exceed minimum standards for purity, generally at least 98%. The percentage of inert matter, other crop seed and weed seed will also be listed on the seed tag.

...for germination

Each eligible seed lot is tested for germination before it can be called certified seed. Certified seed must meet or exceed minimum germination standards, usually 85%. Seed lots with high test weight, high germination and seedling vigor will generally yield better than lower quality seed. Germination must be listed on the seed tag or bulk certificate.

...for seed-borne diseases

Certain diseases are spread through seed-borne mechanisms, whether in or on seed. In order to control these diseases, every lot of specific crops must be tested. It's another tool to ensure North Dakota certified seed is the best it can be.

Field-inspected seed is not certified until it has been lab tested and approved. Ask for a seed tag or bulk certificate with every seed purchase to make sure you are getting quality seed.

Success begins with quality certified seed.

When you plan for the next crop year, purchase certified seed. Planting certified seed is the best way to capture the value bred into that variety. Field inspected, professionally conditioned and lab tested, certified seed meets the high expectations of today's successful farmers. Don't leave anything to chance. Demand certified seed for your farm.

Quality. It's what distinguishes certified seed from all the rest. **Certified seed. Invest in quality. Reap the benefits.**



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